Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the

application. The following listing provides the amended claims with the amendments marked

with deleted material crossed out and new material underlined to show the changes made.

1. (Currently Amended) A method comprising:

defining a new pixel type for the purpose of image processing images of a given file type,

said given file type having a plurality of channels of image data, wherein defining said new pixel

type comprises providing a corresponding channel for each channel of said given file type;

updating codecs to support handling of images formatted in said new pixel type;

converting an image stored in a said given file type into data formatted in said new pixel

type; and

processing said data formatted in said new pixel type using standard image processing

routines, said new pixel type closely correlated to said given file type, said new pixel type

containing all the components of pixels of said given file type, said standard routines designed

for a color space different than that of said given file type and said new pixel type.

2. (Currently Amended) A method according to claim 1 further comprising:

enabling a user to select white levels and super-white levels in said new pixel type, said

super-white levels having a channel value greater than a maximum corresponding channel value

of said given file type.

3. (Currently Amended) A method according to claim 1, wherein said new pixel

type is ordered with the an Alpha channel first, followed by the a Y channel second, followed by

the a Cb channel third, and the a Cr channel fourth, said converting including re-ordering of said

data in given file type to match the order of said new pixel type.

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Attorney Docket No.: APLE.P0010C PTO Serial: 10/791,308 4. (Currently Amended) A method according to claim 3–1, wherein said defining

includes:

providing for the Alpha channel to range from 0 to 255 at least one channel with an

extended range.

5. (Currently Amended) A method according to claim 3-1, wherein said defining

includes:

utilizing of said Y a luminance channel such that black corresponds to a Y luminance

value of 0.

6. (Currently Amended) A method according to claim 4, wherein said channel with

the extended range is an Alpha channel, wherein said converting includes:

if said Alpha channel was present in said given file type, then merely extending

the range of said Alpha channel to correspond to the new pixel type definition; and

if said Alpha channel was not present in said given file type, then filling in Alpha

values for the Alpha channel.

7. (Currently Amended) A method according to claim 5–1, wherein said converting

includes:

subtracting a fixed offset value from the Y at least one channel of data in said given file

type.

8. (Currently Amended) A method according to claim 3 1, wherein said defining

includes:

providing for the Alpha channel to range from 0 to 255 at least one channel with an

extended range; and

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utilizing of said Y a luminance channel such that black corresponds to a Y luminance value of 0.

9. (Original) A method according to claim 8 wherein said converting includes:

if said Alpha channel was present in said given file type, then merely extending the range of said Alpha channel to correspond to the new pixel type definition; and

if said Alpha channel was not present in said given file type, then filling in Alpha values for the Alpha channel; and

subtracting a fixed offset value from the Y channel of data in said given file type.

- 10. (Currently Amended) A method according to claim 1 wherein said given file type has pixels of type v408, and said standard image processing routines were are designed for RGB data.
- 11. (Currently Amended) A method according to claim—10 further 1, wherein said processing is confined to routines that are not color space specific.
- 12. (Currently Amended) A method for processing an image of a given file type having a plurality of channels of image data, said method comprising:

converting said image into data formatted for a new pixel type, said new pixel type elosely correlated with and having all the components of pixels for said given file type said new pixel type defined by a corresponding channel for each channel of said given file type; and

processing said data formatted in said new pixel type using standard image processing routines, said standard routines designed for data having different components of pixels a color space different than that of said new pixel type and said given file type.

13. (Original) A method according to claim 12 further comprising: converting said processed data back into format of said given file type.

Client Docket No.: P2583USC1 Attorney Docket No.: APLE.P0010C PTO Serial: 10/791,308 14. (Original) A method according to claim 13 further comprising:

decompressing said image prior to said converting if said given file type stores

component data in a compressed form.

15. (Original) A method according to claim 13 comprising:

compressing said processed data after said converting back of said processed data into the

format of said given file type.

16. (Currently Amended) A method according to claim 12, wherein said new pixel

type includes an Alpha, a Y, a Cr and a Cb channels, said Alpha channel extended in range, said

Y channel has a value of Black corresponding to zero, all said channels reordered to correspond

closely with said standard routines.

17. (Currently Amended) A computer readable medium having a set of computer

instructions, said computer instructions comprising sets of instructions for: An article comprising

a computer readable medium having instructions stored thereon which when executed cause:

defining a new pixel type for the purpose of image processing images of a given file type,

said given file type having a plurality of channels of image data, wherein defining said new pixel

type comprises providing a corresponding channel for each channel of said given file type;

updating codecs to support handling of images formatted in said new pixel type;

converting an image stored in a said given file type into data formatted in said new pixel

type; and

processing said data formatted in said new pixel type using standard image processing

routines, said new pixel type closely correlated to said given file type, said new pixel type

containing all the components of pixels of said given file-type, said standard routines designed

for a color space different than that of said given file type and said new pixel type.

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18. (Currently Amended) A computer readable medium having a set of computer

instructions for processing an image of a given file type having a plurality of channels of image

data, said computer instructions comprising sets of instructions for: An article comprising a

computer readable medium having instructions stored thereon which when executed enable

processing an image of a given file type, said instructions causing:

converting said image into data formatted for a new pixel type, said new pixel type

closely correlated with and having all the components of pixels for said given file type said new

pixel type defined by a corresponding channel for each channel of said given file type; and

processing said data formatted in said new pixel type using standard image processing

routines, said standard routines designed for data having different components of pixels a color

space different than that of said new pixel type and said given file type.

19. (Currently Amended) An article according to claim 17 The computer medium of

claim 17, wherein said new pixel type includes an Alpha, a Y, a Cr and a Cb channels, said

Alpha channel extended in range, said Y channel has a value of Black corresponding to zero, all

said channels reordered to correspond closely with said standard routines.

20. (Currently Amended) An apparatus comprising:

means for defining a new pixel type for the purpose of-image-processing images of a

given file type, said given file type having a plurality of channels of image data, wherein

defining said new pixel type comprises providing a corresponding channel for each channel of

said given file type;

means for updating codecs to support handling of images formatted in said new pixel

type;

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means for converting an image stored in a said given file type into data formatted in said

new pixel type; and

means for processing said data formatted in said new pixel type using standard image

processing routines, said new pixel type closely correlated to said given file type, said new pixel

type containing all the components of pixels of said given file type, said standard routines

designed for a color space different than that of said given file type and said new pixel type.

21. (Currently Amended) An apparatus enabling processing an image of a given file

type having a plurality of channels of image data, comprising:

means for converting said image into data formatted for a new pixel type, said new-pixel

type closely correlated with and having all the components of pixels for said given file type said

new pixel type defined by a corresponding channel for each channel of said given file type; and

means for processing said data formatted in said new pixel type using standard image

processing routines, said standard routines designed for data having different components of

pixels a color space different than that of said new pixel type and said given file type.

22. (New) A method for processing an image of a given file type having at least two

channels of image data, said method comprising:

converting said image of a given file type into image data of a new pixel type, said new

pixel type defined by a corresponding channel for each channel of said given file type plus an

additional channel that does not correspond to a channel of said given file type, wherein at least

one corresponding channel has an extended range;

processing said image data of said new pixel type.

23. (New) The method of claim 22, wherein said image of said given file type is

compressed, wherein converting comprises decompressing said compressed image.

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24. (New) The method of claim 23, wherein the decompression is performed by a

decompression module, wherein the decompression module is configured to add channel data for

said additional channel.

(New) The method of claim 22 further comprising converting said processed 25.

image data back into image of said given file type.

26. (New) The method of claim 25, wherein said image of said given file type is

compressed, wherein said converting is performed by a compression module.

(New) A method for processing an image of a given file type having at least two 27.

channels of image data, said method comprising:

converting said image of a given file type into image data of a new pixel type, said new

pixel type defined by a corresponding channel for each channel of said given file type, wherein

converting comprises reordering at least two channel of said given file type; and

processing said image data of said new pixel type.

28. (New) The method of claim 27, wherein converting further comprises subtracting

a fixed offset value from at least one channel of said given file type.

29. (New) A method for processing an image of a given file type having at least two

channels of image data, said method comprising:

converting said image of a given file type into image data of a new pixel type, said new

pixel type defined by a corresponding channel for each channel of said given file type, wherein

comprises subtracting a fixed offset value from at least one channel of said given file type;

processing said image data of said new pixel type.

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